



National Nutrient Database for Standard Reference

Release 28 slightly revised May, 2016

Statistics Report 09500, Apples, raw, red delicious, with skin

Report Date: July 01, 2017 12:18 EDT

Nutrient values and weights are for edible portion.

Nutrient	Unit	Value Per 100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Proximates													
Water 1 2 3	g	85.33	13	0.347	82.39	86.91	7.0	84.516	86.152	3	Analytical or derived from analytical	--	08/2012
Energy	kcal	59	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2012
Energy	kJ	247	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2012
Protein 1 2	g	0.27	6	0.017	0.22	0.32	1.0	0.147	0.396	2	Analytical or derived from analytical	--	08/2012
Total lipid (fat) 1 2 3	g	0.20	12	0.010	0.12	0.25	4.0	0.17	0.226	3	Analytical or derived from analytical	--	08/2012
Ash 1 2	g	0.14	6	0.022	0.07	0.19	3.0	0.06	0.213	2	Analytical or derived from analytical	--	08/2012
Carbohydrate, by difference	g	14.06	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2012
Fiber, total dietary 1 2	g	2.3	6	0.127	1.4	3	3.0	1.885	2.64	2	Analytical or derived from analytical	--	08/2012
Sugars, total 1 2	g	10.48	6	0.234	9.25	11.3	4.0	9.815	11.138	2	Analytical or derived from analytical	--	08/2012

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Sucrose 1 2	g	1.86	6	0.093	0.8	2.62	3.0	1.57	2.158	2	Analytical or derived from analytical	--	08/2012
Glucose (dextrose) 1 2	g	2.71	6	0.059	2.45	3.18	2.0	2.459	2.959	2	Analytical or derived from analytical	--	08/2012
Fructose 1 2	g	5.90	6	0.118	5.55	6.16	3.0	5.485	6.322	2	Analytical or derived from analytical	--	08/2012
Lactose 1 2	g	0.00	6	0.000	0	0	--	--	--	2	Analytical or derived from analytical	--	08/2012
Maltose 1 2	g	0.00	6	0.000	0	0	--	--	--	2	Analytical or derived from analytical	--	08/2012
Galactose 1 2	g	0.00	6	0.000	0	0	--	--	--	2	Analytical or derived from analytical	--	08/2012
Starch 2	g	0.05	2	--	0.05	0.05	--	--	--	1	Analytical or derived from analytical	--	08/2012
Minerals													
Calcium, Ca 1 2 4	mg	6	5	0.550	4	9	1.0	-0.009	12.173	3	Analytical or derived from analytical	--	08/2012
Iron, Fe 2 4	mg	0.11	3	0.002	0.09	0.12	1.0	0.081	0.132	2	Analytical or derived from analytical	--	08/2012
Magnesium, Mg 1 2 4	mg	5	5	0.046	5	5	1.0	4.632	5.764	3	Analytical or derived from analytical	--	08/2012

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Phosphorus, P 1 2	mg	12	4	0.347	11	12	2.0	9.974	13.776	2	Analytical or derived from analytical	--	08/2012
Potassium, K 1 2 4	mg	104	5	2.980	94	109	1.0	65.956	141.684	3	Analytical or derived from analytical	--	08/2012
Sodium, Na 4	mg	1	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Zinc, Zn 1 2 4	mg	0.04	5	0.006	0.02	0.07	1.0	-0.009	0.086	3	Analytical or derived from analytical	--	08/2012
Copper, Cu 2 4	mg	0.027	3	0.000	0.02	0.03	--	--	--	2	Analytical or derived from analytical	--	08/2012
Manganese, Mn 1 2 4	mg	0.034	5	0.003	0.03	0.05	1.0	0.004	0.064	3	Analytical or derived from analytical	--	08/2012
Selenium, Se 2	µg	0.0	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Vitamins													
Thiamin 1 2	mg	0.015	4	0.002	0.01	0.02	2.0	0.006	0.024	2	Analytical or derived from analytical	--	08/2012
Riboflavin 1 2	mg	0.025	4	0.002	0.01	0.04	2.0	0.017	0.033	2	Analytical or derived from analytical	--	08/2012
Niacin 2	mg	0.075	2	--	0.07	0.08	1.0	--	--	1	Analytical or derived from analytical	--	08/2012

Nutrient	Unit	Value Per 100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Pantothenic acid 1 2	mg	0.051	4	0.003	0.03	0.08	1.0	0.012	0.09	2	Analytical or derived from analytical	--	08/2012
Vitamin B-6 1 2	mg	0.034	4	0.002	0.03	0.04	1.0	0.017	0.051	2	Analytical or derived from analytical	--	08/2012
Folate, total	µg	3	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2012
Folate, food	µg	3	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2012
Choline, total	mg	3.4	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2012
Vitamin A, RAE 1 2	µg	3	4	0.172	2	3	1.0	1.622	3.878	2	Analytical or derived from analytical	--	08/2012
Carotene, beta 1 2	µg	27	4	1.118	25	29	2.0	20.081	33.919	2	Analytical or derived from analytical	--	08/2012
Carotene, alpha 1 2	µg	0	4	0.000	0	0	--	--	--	2	Analytical or derived from analytical	--	08/2012
Cryptoxanthin, beta 1 2	µg	12	4	1.904	7	15	1.0	-1.334	25.334	2	Analytical or derived from analytical	--	08/2012
Vitamin A, IU 1 2	IU	55	4	3.449	48	60	1.0	32.433	77.567	2	Analytical or derived from analytical	--	08/2012
Lycopene 1 2	µg	0	4	0.000	0	0	--	--	--	2	Analytical or derived from analytical	--	08/2012

Nutrient	Unit	Value Per 100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Lutein + zeaxanthin 1 2	µg	31	4	1.803	22	40	2.0	21.533	39.467	2	Analytical or derived from analytical	--	08/2012
Vitamin E (alpha-tocopherol) 3	mg	0.24	6	0.055	0.08	0.38	5.0	0.102	0.384	1	Analytical or derived from analytical	--	08/2012
Tocopherol, beta 3	mg	0.00	6	0.000	0	0	--	--	--	1	Analytical or derived from analytical	--	08/2012
Tocopherol, gamma 3	mg	0.00	6	0.000	0	0	--	--	--	1	Analytical or derived from analytical	--	08/2012
Tocopherol, delta 3	mg	0.00	6	0.000	0	0	--	--	--	1	Analytical or derived from analytical	--	08/2012
Vitamin K (phylloquinone) 1 2	µg	2.6	4	0.125	2.2	3.1	2.0	2.045	3.205	2	Analytical or derived from analytical	--	08/2012
Lipids													
Fatty acids, total trans	g	0.000	--	--	--	--	--	--	--	--	Assumed zero	--	06/2015
Amino Acids													
Tryptophan 2	g	0.001	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Threonine 2	g	0.006	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Isoleucine 2	g	0.006	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Leucine 2	g	0.013	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Lysine 2	g	0.013	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Methionine 2	g	0.001	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Cystine 2	g	0.001	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Phenylalanine 2	g	0.007	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Tyrosine 2	g	0.001	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Valine 2	g	0.012	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Arginine 2	g	0.006	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Histidine 2	g	0.005	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Alanine 2	g	0.012	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Aspartic acid ²	g	0.073	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Glutamic acid ²	g	0.026	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Glycine ²	g	0.009	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Proline ²	g	0.006	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012
Serine ²	g	0.011	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2012

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Flavonoids													
Anthocyanidins													
Cyanidin 8 9 10 11 12	mg	4.91	--	0.97	1.41	15.42	--	--	--	--	--	--	--
Petunidin 9	mg	0.0	--	0	0	0	--	--	--	--	--	--	--
Delphinidin 8 9	mg	0.0	--	0	0	0.02	--	--	--	--	--	--	--
Malvidin 9	mg	0.0	--	0	0	0	--	--	--	--	--	--	--
Pelargonidin 8 9	mg	0.0	--	0	0	0.02	--	--	--	--	--	--	--
Peonidin 9 12	mg	0.1	--	0.05	0	0.28	--	--	--	--	--	--	--
Flavan-3-ols													
(+)-Catechin 9 10 11 13 14	mg	2.0	--	0.35	0	3.1	--	--	--	--	--	--	--
(-)-Epigallocatechin 9 13	mg	0.4	--	0.24	0	1.44	--	--	--	--	--	--	--
(-)-Epicatechin 9 10 11 13 14	mg	9.8	--	1.58	0.8	15.92	--	--	--	--	--	--	--
(-)-Epicatechin 3-gallate 9 13	mg	0.0	--	0	0	0	--	--	--	--	--	--	--
(-)-Epigallocatechin 3-gallate 9 13	mg	0.1	--	0.09	0	0.65	--	--	--	--	--	--	--
(+)-Gallocatechin 9 13	mg	0.0	--	0	0	0	--	--	--	--	--	--	--
Flavanones													
Hesperetin 9	mg	0.0	--	0	0	0	--	--	--	--	--	--	--
Naringenin 9	mg	0.0	--	0	0	0	--	--	--	--	--	--	--
Flavones													
Apigenin 8 9	mg	0.0	--	0	0	0.01	--	--	--	--	--	--	--
Luteolin 8 9	mg	0.0	--	0	0	0.02	--	--	--	--	--	--	--
Flavonols													
Myricetin 8 9	mg	0.0	--	0	0	0.03	--	--	--	--	--	--	--
Quercetin 8 9 10 11 14	mg	3.9	--	0.52	0.25	7.6	--	--	--	--	--	--	--
Proanthocyanidin													
Proanthocyanidin dimers 5 6 7	mg	12.6	--	3.88	7.91	25.5	--	--	--	--	--	--	--
Proanthocyanidin trimers 5 6 7	mg	11.8	--	5.04	6.44	23.2	--	--	--	--	--	--	--
Proanthocyanidin 4-6mers 6 7	mg	32.8	--	10.3	21.37	49.5	--	--	--	--	--	--	--
Proanthocyanidin 7-10mers 6 7	mg	23.1	--	5.99	15.1	30.35	--	--	--	--	--	--	--
Proanthocyanidin polymers (>10mers) 6 7	mg	36.8	--	11.84	21.6	54.25	--	--	--	--	--	--	--

Sources of Data

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